

FRAME-BASED OCCUPANT WEIGHT ESTIMATION
APPARATUS HAVING COMPLIANT LINKAGE ASSEMBLY

Abstract of the Disclosure

A frame-based occupant weight estimation apparatus for a vehicle seat includes a compliant linkage assembly that translates vertically applied seat loads to a horizontal plane, where the horizontal forces are measured by a set of force sensors. A compliant member, which may be a spring or a linkage arm, preloads the force sensors to enable off-loading detection, and an overload device securely anchors the seat to the vehicle floor without interfering with normal load measurement.